# Claims:

# 1. A compound of formula (I)

### in which

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- ▶ n represents 1, 2 or 3;
- ▶ A represents a substituent chosen from -C(O)-, -C(S)-,  $-CH_2$ -,  $-CHR^{10}$ -,  $-CR^{10}R^{11}$ -, -C(O)O-, -C(O)S-, -C(S)O-, -C(S)S-, -C(O)NH-, -C(NH)NH- and -C(S)NH-;
- B represents
  - an arylene;
  - a heteroarylene comprising 1 or 2 hetero atoms chosen from nitrogen, oxygen and sulfur;
  - a naphthylene;
  - a heteronaphthylene comprising 1 or 2 hetero atoms chosen from nitrogen, oxygen and sulfur;
  - a divalent radical derived from 2 fused aromatic rings containing 5 or 6 atoms each;
  - a divalent radical derived from 2 fused aromatic or heteroaromatic rings containing 5 or 6 atoms each and comprising 1 or 2 hetero atoms chosen from nitrogen, oxygen and sulfur;
  - a biphenylene;
  - or a heterobiphenylene comprising 1 or 2 hetero atoms chosen from nitrogen, oxygen and sulfur:

these groups possibly being substituted with one or two substituents  $R^{12}$  and  $R^{13}$  chosen, independently of each other, from halogen, CN, C(O)OR<sup>14</sup>, C(O)NR<sup>15</sup>R<sup>16</sup>, CF<sub>3</sub>, OCF<sub>3</sub>, -NO<sub>2</sub>, N<sub>3</sub>, OR<sup>14</sup>, SR<sup>14</sup>, NR<sup>15</sup>R<sup>16</sup> and C<sub>1-6</sub>-alkyl;

- ► C represents a substituent chosen from -O-, -S-, -CH<sub>2</sub>-, -CHR<sup>17</sup>-, -CR<sup>17</sup>R<sup>18</sup>-, -NH- and -NR<sup>19</sup>;
- ▶ D represents a linear or branched, saturated or unsaturated hydrocarbon-based chain containing from 2 to 20 carbon atoms;
- ► E and G represent, independently of each other, a substituent chosen from H, OH, OR<sup>20</sup>, NH<sub>2</sub> and NHR<sup>20</sup>;

- ► R¹ represents a substituent chosen from H, C₁-6-alkyl, C(O)H and C(O)CH₃;
- ▶  $R^2$ ,  $R^3$ ,  $R^6$ ,  $R^{14}$ ,  $R^{15}$ ,  $R^{16}$  and  $R^{19}$  represent, independently of each other, a substituent chosen from H,  $C_{1^-6}$ -alkyl,  $C(O)C_{1^-6}$ -alkyl,  $-C(S)C_{1^-6}$ -alkyl,  $-C(O)OC_{1^-6}$ -alkyl,  $-C(O)NH_2$ ,  $-C(S)NH_2$ ,  $-C(NH)NH_2$ ,  $-C(O)NHC_{1^-6}$ -alkyl,  $-C(S)NHC_{1^-6}$ -alkyl and  $-C(NH)NHC_{1^-6}$ -alkyl;
- ► R<sup>4</sup> represents a substituent chosen from H, C<sub>1-6</sub>-alkyl and R<sup>21</sup>;
- ▶ R<sup>5</sup> represents a substituent chosen from H, C<sub>1-6</sub>-alkyl, fucosyl and R<sup>22</sup>;
- ▶ R<sup>7</sup> represents a substituent chosen from H, C<sub>1-6</sub>-alkyl, arabinosyl and R<sup>23</sup>;
- ▶  $R^8$  represents a substituent chosen from H,  $C_{1^-6}$ -alkyl, fucosyl, methylfucosyl, sulfofucosyl, acetylfucosyl, arabinosyl,  $SO_3H$ ,  $SO_3I$ i,  $SO_3Na$ ,  $SO_3K$ ,  $SO_3N(C_{1^-8}alkyl)_4$  and  $R^{2^4}$ ;
- ▶ R<sup>9</sup> represents a substituent chosen from H, C<sub>1-6</sub>-alkyl, mannose, glycerol and R<sup>25</sup>;
- $ightharpoonup R^{10}$ ,  $R^{11}$ ,  $R^{17}$  and  $R^{18}$  represent, independently of each other, a substituent chosen from  $C_{1^-6}$ -alkyl and F:
- ▶  $R^{20}$ ,  $R^{21}$ ,  $R^{22}$ ,  $R^{23}$ ,  $R^{24}$  and  $R^{25}$  represent, independently of each other, a substituent chosen from  $C(O)C_{1^-6^-}$ alkyl,  $-C(S)C_{1^-6^-}$ alkyl,  $-C(O)OC_{1^-6^-}$ alkyl,  $-C(O)NH_2$ ,  $-C(S)NH_2$ ,  $-C(NH)NH_2$ ,  $-C(O)NHC_{1^-6^-}$ alkyl,  $-C(S)NHC_{1^-6^-}$ alkyl,  $-C(S)NHC_{1^-6^-}$

and also the possible geometrical and/or optical isomers, enantiomers and/or diastereoisomers, tautomers, salts, N-oxides, sulfoxides, sulfones, and metal or metalloid complexes thereof, which are agriculturally acceptable, such as lithium, sodium, potassium and tetraalkylammonium salts.

- 20 2. The compound of formula (I) as claimed in claim 1, having one or other of the following characteristics, taken separately or in combination:
  - ▶ n represents 2 or 3;

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- ► A represents -C(0)- or -CH<sub>2</sub>-;
- ▶ B represents a phenylene;
- ▶ C represents -O-;
- ▶ D represents a linear, saturated or unsaturated hydrocarbon-based chain containing from 3 to 17 carbon atoms;
- ▶ E and G represent NHC(O)CH<sub>3</sub>;
- ► R¹ represents H, CH₃ or C(O)CH₃;
- ► R<sup>2</sup>, R<sup>3</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>9</sup> represent H;
- ► R<sup>4</sup> represents H, C(O)CH<sub>3</sub> or C(O)NH<sub>2</sub>;
- ▶ R<sup>8</sup> represents H, SO<sub>3</sub>H, SO<sub>3</sub>Li, SO<sub>3</sub>Na, SO<sub>3</sub>K, SO<sub>3</sub>N(C<sub>1-8</sub>alkyl)<sub>4</sub>, fucosyl or methylfucosyl.
- 3. The compound of formula (I) as claimed in claim 1 or 2, simultaneously having the following characteristics:
  - n represents 2 or 3;

- ▶ A represents -C(O)- or -CH<sub>2</sub>-;
- ► E and G represent NHC(O)CH<sub>3</sub>;
- ► R¹ represents H, CH₃ or C(O)CH₃;
- ► R<sup>2</sup>, R<sup>3</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>9</sup> represent H;
- ► R<sup>4</sup> represents H, C(O)CH<sub>3</sub> or C(O)NH<sub>2</sub>;
- ► R<sup>8</sup> represents H, SO<sub>3</sub>H, SO<sub>3</sub>Li, SO<sub>3</sub>Na, SO<sub>3</sub>K, SO<sub>3</sub>N(C<sub>1-8</sub>alkyl)<sub>4</sub>, fucosyl or methylfucosyl.
- 4. The compound of formula (I) as claimed in any one of claims 1 to 3, simultaneously having the following characteristics:
  - ▶ n represents 2 or 3;

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- ▶ A represents -C(O)- or -CH<sub>2</sub>-;
- ▶ D represents a linear, saturated or unsaturated hydrocarbon-based chain containing from 3 to 17 carbon atoms;
- ► E and G represent NHC(O)CH<sub>3</sub>;
- ► R¹ represents H, CH₃ or C(O)CH₃;
- ► R<sup>2</sup>, R<sup>3</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>9</sup> represent H;
- ► R<sup>4</sup> represents H, C(O)CH<sub>3</sub> or C(O)NH<sub>2</sub>;
- ▶ R<sup>8</sup> represents H. SO<sub>3</sub>H, SO<sub>3</sub>Li, SO<sub>3</sub>Na, SO<sub>3</sub>K, SO<sub>3</sub>N(C<sub>1-8</sub>alkyl)<sub>4</sub>, fucosyl or methylfucosyl.
- 5. The compound of formula (I) as claimed in any one of claims 1 to 4, simultaneously having the following characteristics:
  - n represents 2 or 3;
  - ▶ A represents -C(O)- or -CH<sub>2</sub>-;
  - ▶ C represents -O-;
  - ▶ D represents a linear, saturated or unsaturated hydrocarbon-based chain containing from 3 to 17 carbon atoms;
    - ► E and G represent NHC(O)CH<sub>3</sub>;
    - ► R<sup>1</sup> represents H, CH<sub>3</sub> or C(O)CH<sub>3</sub>;
    - ► R<sup>2</sup>, R<sup>3</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>9</sup> represent H;
    - ► R<sup>4</sup> represents H, C(O)CH<sub>3</sub> or C(O)NH<sub>2</sub>;
    - ▶ R<sup>8</sup> represents H, SO<sub>3</sub>H, SO<sub>3</sub>Li, SO<sub>3</sub>Na, SO<sub>3</sub>K, SO<sub>3</sub>N(C<sub>1-8</sub>alkyl)<sub>4</sub>, fucosyl or methylfucosyl.
  - 6. The compound of formula (I) as claimed in any one of claims 1 to 5, simultaneously having the following characteristics:
    - n represents 2 or 3;
    - ▶ A represents -C(O)- or -CH<sub>2</sub>-;

- ▶ B represents a phenylene;
- ► C represents -O-;
- ▶ D represents a linear hydrocarbon-based chain containing 11 carbons, which is saturated, or unsaturated between carbons 4 and 5;
- ► E and G represent NHC(O)CH<sub>3</sub>;
- ► R<sup>1</sup> represents H, CH<sub>3</sub> or C(O)CH<sub>3</sub>;
- R<sup>2</sup>, R<sup>3</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>9</sup> represent H;
- ► R<sup>4</sup> represents H, C(O)CH<sub>3</sub> or C(O)NH<sub>2</sub>;
- R<sup>8</sup> represents H, SO<sub>3</sub>H, SO<sub>3</sub>Li, SO<sub>3</sub>Na, SO<sub>3</sub>K, SO<sub>3</sub>N(C<sub>1</sub>-8alkyl)<sub>4</sub>, fucosyl or methylfucosyl.
- 7. The compound as claimed in claim 1 and of formula (la)

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- ▶ n represents 1, 2 or 3,
- B represents
  - an arylene;
  - a heteroarylene comprising 1 or 2 hetero atoms chosen from nitrogen, oxygen and sulfur;
  - a naphthylene;
  - a heteronaphthylene comprising 1 or 2 hetero atoms chosen from nitrogen, oxygen and sulfur;
  - a divalent radical derived from 2 fused aromatic rings containing 5 or 6 atoms each;
  - a divalent radical derived from 2 fused aromatic or heteroaromatic rings containing 5 or 6 atoms each and comprising 1 or 2 hetero atoms chosen from nitrogen, oxygen and sulfur;
  - a biphenylene;
  - or a heterobiphenylene comprising 1 or 2 hetero atoms chosen from nitrogen, oxygen and sulfur;

these groups possibly being substituted with one or two substituents  $R^{12}$  and  $R^{13}$  chosen, independently of each other, from halogen, CN, C(O)OR<sup>14</sup>, C(O)NR<sup>15</sup>R<sup>16</sup>, CF<sub>3</sub>, OCF<sub>3</sub>, -NO<sub>2</sub>, N<sub>3</sub>, OR<sup>14</sup>, SR<sup>14</sup>, NR<sup>15</sup>R<sup>16</sup> and C<sub>1-6</sub>-alkyl;

- ► C represents a substituent chosen from -O-, -S-, -CH<sub>2</sub>-, -CHR<sup>17</sup>-, -CR<sup>17</sup>R<sup>18</sup>-, -NH- or -NR<sup>19</sup>;
- ▶ D represents a linear or branched, saturated or unsaturated hydrocarbon-based chain containing from 2 to 20 carbon atoms;
- ► E and G represent, independently of each other, a substituent chosen from H, OH, OR<sup>20</sup>, NH<sub>2</sub>, NHR<sup>20</sup>.
- ► R<sup>1</sup> represents a substituent chosen from H, C<sub>1-6</sub>-alkyl, C(O)H, and C(O)CH<sub>3</sub>;
- $R^2$ ,  $R^3$ , and  $R^6$  represent, independently of each other, a substituent chosen from H,  $C_{1^-6^-}$ alkyl,  $C(O)C_{1^-6^-}$ alkyl,  $-C(S)C_{1^-6^-}$ alkyl,  $-C(O)OC_{1^-6^-}$ alkyl,  $-C(O)NH_2$ ,  $-C(S)NH_2$ ,  $-C(NH)NH_2$ ,  $-C(O)NHC_{1^-6^-}$ alkyl,  $-C(S)NHC_{1^-6^-}$ 
  - ▶ R<sup>4</sup> represents a substituent chosen from H, C<sub>1-6</sub>-alkyl or R<sup>21</sup>;
  - ▶ R<sup>5</sup> represents a substituent chosen from H, C<sub>1-6</sub>-alkyl, fucosyl or R<sup>22</sup>;
  - ► R<sup>7</sup> represents a substituent chosen from H, C<sub>1-6</sub>-alkyl, arabinosyl or R<sup>23</sup>;
  - ▶ R<sup>8</sup> represents a substituent chosen from H, C<sub>1-6</sub>-alkyl, fucosyl, methylfucosyl, sulfofucosyl, acetylfucosyl, arabinosyl, SO<sub>3</sub>H, SO<sub>3</sub>Li, SO<sub>3</sub>Na, SO<sub>3</sub>K, SO<sub>3</sub>N(C<sub>1-8</sub>alkyl)<sub>4</sub> or R<sup>24</sup>;
  - ▶ R<sup>9</sup> represents a substituent chosen from H, C<sub>1-6</sub>-alkyl, mannose, glycerol or R<sup>25</sup>;
  - ▶  $R^{10}$ ,  $R^{11}$ ,  $R^{17}$  and  $R^{18}$  represent, independently of each other, a substituent chosen from  $C_{1^-6}$ -alkyl or F;
  - ▶  $R^{14}$ ,  $R^{15}$ ,  $R^{16}$  and  $R^{19}$  represent, independently of each other, a substituent chosen from H or  $C_{1^-6^-}$  alkyl,  $-C(O)C_{1^-6^-}$  alkyl,  $-C(O)C_{1^-6^-}$  alkyl,  $-C(O)NH_2$ ,  $-C(O)NH_2$ ,
  - ▶  $R^{20}$ ,  $R^{21}$ ,  $R^{22}$ ,  $R^{23}$ ,  $R^{24}$  and  $R^{25}$  represent, independently of each other, a substituent chosen from  $C(O)C_{1^-6^-}$ alkyl,  $-C(S)C_{1^-6^-}$ alkyl,  $-C(O)OC_{1^-6^-}$ alkyl,  $-C(O)NH_2$ ,  $-C(S)NH_2$ ,  $-C(NH)NH_2$ ,  $-C(O)NHC_{1^-6^-}$ alkyl,  $-C(S)NHC_{1^-6^-}$ alkyl,  $-C(NH)NHC_{1^-6^-}$ alkyl,  $-C(NH)NHC_{1^-6^-}$
- and also the possible geometrical and/or optical isomers, enantiomers and/or diastereoisomers, tautomers, salts, N-oxides, sulfoxides, sulfones, and metal or metalloid complexes thereof, which are agriculturally acceptable. Among the compounds defined above, the most important compounds are the salts, more particularly the lithium, sodium, potassium or tetraalkylammonium salts.
- 8. The compound of formula (Ia) as claimed in claim 7, having one or other of the following characteristics, taken separately or in combination:
  - n represents 2 or 3;

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- B represents a phenylene;
- ► C represents -O-;
- ▶ D represents a linear, saturated or unsaturated hydrocarbon-based chain containing from 3 to 17 carbon atoms;
- ► E and G represent NHC(O)CH<sub>3</sub>;

- R<sup>1</sup> represents H or CH<sub>3</sub>;
- ightharpoonup R<sup>2</sup>, R<sup>3</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>9</sup> represent H;
- ► R<sup>4</sup> represents H, C(O)CH<sub>3</sub> or C(O)NH<sub>2</sub>;
- ► R<sup>8</sup> represents H, SO<sub>3</sub>H, SO<sub>3</sub>Li, SO<sub>3</sub>Na, SO<sub>3</sub>K, SO<sub>3</sub>N(C<sub>1-8</sub>alkyl)<sub>4</sub>, fucosyl or methylfucosyl.
- 9. The compound of formula (Ia) as claimed in claim 7 or 8, simultaneously having the following characteristics:
  - n represents 2 or 3;

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- ► E and G represent NHC(O)CH<sub>3</sub>;
- ▶ R¹ represents H or CH₃;
- ► R<sup>2</sup>, R<sup>3</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>9</sup> represent H;
- ► R<sup>4</sup> represents H, C(O)CH<sub>3</sub> or C(O)NH<sub>2</sub>;
- ► R<sup>8</sup> represents H, SO<sub>3</sub>H, SO<sub>3</sub>Li, SO<sub>3</sub>Na, SO<sub>3</sub>K, SO<sub>3</sub>N(C<sub>1-8</sub>alkyl)<sub>4</sub>, fucosyl or methylfucosyl.
- 10. The compound of formula (Ia) as claimed in any one of claims 7 to 9, simultaneously having the following characteristics:
  - ▶ n represents 2 or 3;
  - ▶ D represents a linear, saturated or unsaturated hydrocarbon-based chain containing from 3 to 17 carbon atoms;
- ≥ E and G represent NHC(O)CH<sub>3</sub>;
  - ► R¹ represents H or CH<sub>3</sub>;
  - ► R<sup>2</sup>, R<sup>3</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>9</sup> represent H;
  - ► R<sup>4</sup> represents H, C(O)CH<sub>3</sub> or C(O)NH<sub>2</sub>;
  - ► R<sup>8</sup> represents H, SO<sub>3</sub>H, SO<sub>3</sub>Li, SO<sub>3</sub>Na, SO<sub>3</sub>K, SO<sub>3</sub>N(C<sub>1-8</sub>alkyl)<sub>4</sub>, fucosyl or methylfucosyl.
  - 11. The compound of formula (Ia) as claimed in any one of claims 7 to 10, simultaneously having the following characteristics:
    - n represents 2 or 3;
    - ► C represents -O-;
- D represents a linear, saturated or unsaturated hydrocarbon-based chain containing from 3 to 17 carbon atoms;
  - ► E and G represent NHC(O)CH<sub>3</sub>;
  - ▶ R¹ represents H or CH₃;
  - ► R<sup>2</sup>, R<sup>3</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>9</sup> represent H;
  - ► R<sup>4</sup> represents H, C(O)CH<sub>3</sub> or C(O)NH<sub>2</sub>;
  - ▶ R<sup>8</sup> represents H, SO<sub>3</sub>H, SO<sub>3</sub>Li, SO<sub>3</sub>Na, SO<sub>3</sub>K, SO<sub>3</sub>N(C<sub>1-8</sub>alkyl)<sub>4</sub>, fucosyl or methylfucosyl.

- 12. The compound of formula (Ia) as claimed in any one of claims 7 to 11, simultaneously having the following characteristics:
  - n represents 2 or 3;
  - ▶ B represents a phenylene;
  - ► C represents -O-;

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- ▶ D represents a linear hydrocarbon-based chain containing 11 carbons, which is saturated, or unsaturated between carbons 4 and 5;
- ► E and G represent NHC(O)CH<sub>3</sub>;
- R<sup>1</sup> represents H or CH<sub>3</sub>;
  - ► R<sup>2</sup>, R<sup>3</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>9</sup> represent H;
  - ► R<sup>4</sup> represents H, C(O)CH<sub>3</sub> or C(O)NH<sub>2</sub>;
  - ► R<sup>8</sup> represents H, SO<sub>3</sub>H, SO<sub>3</sub>Li, SO<sub>3</sub>Na, SO<sub>3</sub>K, SO<sub>3</sub>N(C<sub>1-8</sub>alkyl)<sub>4</sub>, fucosyl or methylfucosyl.
- 15 13. The compound as claimed in claim 1 and of formula (lb)

$$R3$$
 $O-R4$ 
 $O-R6$ 
 $O-R8$ 
 $O-R6$ 
 $O-R8$ 
 $O-R9$ 
 $O-$ 

in which

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- ▶ n represents 1, 2 or 3,
  - ▶ B represents
    - an arylene;
    - a heteroarylene comprising 1 or 2 hetero atoms chosen from nitrogen, oxygen and sulfur;
    - a naphthylene;
    - a heteronaphthylene comprising 1 or 2 hetero atoms chosen from nitrogen, oxygen and sulfur;
    - a divalent radical derived from 2 fused aromatic rings containing 5 or 6 atoms each;
    - a divalent radical derived from 2 fused aromatic or heteroaromatic rings containing 5 or 6 atoms each and comprising 1 or 2 hetero atoms chosen from nitrogen, oxygen and sulfur;
  - a biphenylene;

• or a heterobiphenylene comprising 1 or 2 hetero atoms chosen from nitrogen, oxygen and sulfur;

these groups possibly being substituted with one or two substituents  $R^{12}$  and  $R^{13}$  chosen, independently of each other, from halogen, CN, C(O)OR<sup>14</sup>, C(O)NR<sup>15</sup>R<sup>16</sup>, CF<sub>3</sub>, OCF<sub>3</sub>, -NO<sub>2</sub>, N<sub>3</sub>, OR<sup>14</sup>, SR<sup>14</sup>, NR<sup>15</sup>R<sup>16</sup> and C<sub>1</sub>-6-alkyl;

- ► C represents a substituent chosen from -O-, -S-, -CH<sub>2</sub>-, -CHR<sup>17</sup>-, -CR<sup>17</sup>R<sup>18</sup>-, -NH- or -NR<sup>19</sup>;
- ▶ D represents a linear or branched, saturated or unsaturated hydrocarbon-based chain containing from 2 to 20 carbon atoms;
- ► E and G represent, independently of each other, a substituent chosen from H, OH, OR<sup>20</sup>, NH<sub>2</sub>, NHR<sup>20</sup>;
- ▶ R¹ represents a substituent chosen from H, C₁-6-alkyl, C(O)H, and C(O)CH₃;
- ▶  $R^2$ ,  $R^3$ , and  $R^6$  represent, independently of each other, a substituent chosen from H,  $C_{1^-6^-}$ alkyl,  $C(O)C_{1^-6^-}$ alkyl,  $-C(S)C_{1^-6^-}$ alkyl,  $-C(O)OC_{1^-6^-}$ alkyl,  $-C(O)NH_2$ ,  $-C(S)NH_2$ ,  $-C(NH)NH_2$ ,  $-C(O)NHC_{1^-6^-}$ alkyl,  $-C(S)NHC_{1^-6^-}$ alkyl,  $-C(NH)NHC_{1^-6^-}$ alkyl,  $-C(NH)NHC_{1^-6^-}$
- ▶ R<sup>4</sup> represents a substituent chosen from H, C<sub>1-6</sub>-alkyl or R<sup>21</sup>;
- ▶ R<sup>5</sup> represents a substituent chosen from H, C<sub>1-6</sub>-alkyl, fucosyl or R<sup>22</sup>;
- ► R<sup>7</sup> represents a substituent chosen from H, C<sub>1-6</sub>-alkyl, arabinosyl or R<sup>23</sup>;
- ▶ R<sup>8</sup> represents a substituent chosen from H, C<sub>1-6</sub>-alkyl, fucosyl, methylfucosyl, sulfofucosyl, acetylfucosyl, arabinosyl, SO<sub>3</sub>H, SO<sub>3</sub>Li, SO<sub>3</sub>Na, SO<sub>3</sub>K, SO<sub>3</sub>N(C<sub>1-8</sub>alkyl)<sub>4</sub> or R<sup>24</sup>;
- ► R<sup>9</sup> represents a substituent chosen from H, C<sub>1-6</sub>-alkyl, mannose, glycerol or R<sup>25</sup>;
- ▶ R<sup>10</sup>, R<sup>11</sup>, R<sup>17</sup> and R<sup>18</sup> represent, independently of each other, a substituent chosen from C<sub>1-6</sub>-alkyl or F:
- ▶  $R^{14}$ ,  $R^{15}$ ,  $R^{16}$  and  $R^{19}$  represent, independently of each other, a substituent chosen from H or  $C_{1^-6^-}$  alkyl,  $-C(O)C_{1^-6^-}$  alkyl,  $-C(O)C_{1^-6^-}$  alkyl,  $-C(O)NH_2$ ,  $-C(O)NH_2$ ,
- ▶  $R^{20}$ ,  $R^{21}$ ,  $R^{22}$ ,  $R^{23}$ ,  $R^{24}$  and  $R^{25}$  represent, independently of each other, a substituent chosen from  $C(O)C_{1^-6^-}$ alkyl,  $-C(S)C_{1^-6^-}$ alkyl,  $-C(O)OC_{1^-6^-}$ alkyl,  $-C(O)NH_2$ ,  $-C(S)NH_2$ ,  $-C(NH)NH_2$ ,  $-C(O)NHC_{1^-6^-}$ alkyl,  $-C(S)NHC_{1^-6^-}$ alkyl,  $-C(NH)NHC_{1^-6^-}$ alkyl,  $-C(NH)NHC_{1^-6^-}$ alkyl,

and also the possible geometrical and/or optical isomers, enantiomers and/or diastereoisomers, tautomers, salts, N-oxides, sulfoxides, sulfones, and metal or metalloid complexes thereof, which are agriculturally acceptable. Among the compounds defined above, the most important compounds are the salts, more particularly the lithium, sodium, potassium or tetraalkylammonium salts.

- 14. The compound of formula (lb) as claimed in claim 13, having one or other of the following characteristics, taken separately or in combination:
  - n represents 2 or 3;

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- ▶ B represents a phenylene;
- ► C represents -O-;

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- ▶ D represents a linear, saturated or unsaturated hydrocarbon-based chain containing from 3 to 17 carbon atoms;
- ▶ E and G represent NHC(O)CH<sub>3</sub>;
- ► R¹ represents H or C(O)CH<sub>3</sub>;
- ► R<sup>2</sup>, R<sup>3</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>9</sup> represent H;
- ► R<sup>4</sup> represents H, C(O)CH<sub>3</sub> or C(O)NH<sub>2</sub>;
- ▶ R<sup>8</sup> represents H, SO<sub>3</sub>H, SO<sub>3</sub>Li, SO<sub>3</sub>Na, SO<sub>3</sub>K, SO<sub>3</sub>N(C<sub>1-8</sub>alkyl)<sub>4</sub>, fucosyl or methylfucosyl.
- 15. The compound of formula (Ib) as claimed in claim 13 or 14, simultaneously having the following characteristics:
  - ▶ n represents 2 or 3;
  - ► E and G represent NHC(O)CH<sub>3</sub>;
  - ► R¹ represents H or C(O)CH<sub>3</sub>;
  - ► R<sup>2</sup>, R<sup>3</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>9</sup> represent H;
  - ► R<sup>4</sup> represents H, C(O)CH<sub>3</sub> or C(O)NH<sub>2</sub>;
  - ► R<sup>8</sup> represents H, SO<sub>3</sub>H, SO<sub>3</sub>Li, SO<sub>3</sub>Na, SO<sub>3</sub>K, SO<sub>3</sub>N(C<sub>1-8</sub>alkyl)<sub>4</sub>, fucosyl or methylfucosyl.
- 16. The compound of formula (Ib) as claimed in any one of claims 13 to 15 simultaneously having the following characteristics:
  - ▶ n represents 2 or 3;
  - ▶ D represents a linear, saturated or unsaturated hydrocarbon-based chain containing from 3 to 17 carbon atoms;
  - ▶ E and G represent NHC(O)CH<sub>3</sub>;
    - ► R<sup>1</sup> represents H or C(O)CH<sub>3</sub>;
    - ► R<sup>2</sup>, R<sup>3</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>9</sup> represent H;
    - ► R<sup>4</sup> represents H, C(O)CH<sub>3</sub> or C(O)NH<sub>2</sub>;
    - ▶ R<sup>8</sup> represents H, SO<sub>3</sub>H, SO<sub>3</sub>Li, SO<sub>3</sub>Na, SO<sub>3</sub>K, SO<sub>3</sub>N(C<sub>1</sub>-8alkyl)<sub>4</sub>, fucosyl or methylfucosyl.
  - 17. The compound of formula (lb) as claimed in any one of claims 13 to 16 simultaneously having the following characteristics:
    - ▶ n represents 2 or 3;
    - ▶ C represents -O-;
- D represents a linear, saturated or unsaturated hydrocarbon-based chain containing from 3 to 17 carbon atoms;

- ► E and G represent NHC(O)CH<sub>3</sub>;
- ▶ R¹ represents H or C(O)CH₃;
- ightharpoonup R<sup>2</sup>, R<sup>3</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>9</sup> represent H;
- ► R<sup>4</sup> represents H, C(O)CH<sub>3</sub> or C(O)NH<sub>2</sub>;
- ▶ R<sup>8</sup> represents H, SO<sub>3</sub>H, SO<sub>3</sub>Li, SO<sub>3</sub>Na, SO<sub>3</sub>K, SO<sub>3</sub>N(C<sub>1-8</sub>alkyl)<sub>4</sub>, fucosyl or methylfucosyl.
- 18. The compound of formula (Ib) as claimed in any one of claims 13 to 17 simultaneously having the following characteristics:
  - ▶ n represents 2 or 3;

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- ▶ B represents a phenylene;
- ► C represents -O-;
- ▶ D represents a linear hydrocarbon-based chain containing 11 carbons, which is saturated, or unsaturated between carbons 4 and 5;
- ► E and G represent NHC(O)CH<sub>3</sub>;
- ▶ R¹ represents H or C(O)CH₃;
- ightharpoonup R<sup>2</sup>, R<sup>3</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>9</sup> represent H;
- ► R<sup>4</sup> represents H, C(O)CH<sub>3</sub> or C(O)NH<sub>2</sub>;
- ▶ R<sup>8</sup> represents H, SO<sub>3</sub>H, SO<sub>3</sub>Li, SO<sub>3</sub>Na, SO<sub>3</sub>K, SO<sub>3</sub>N(C<sub>1-8</sub>alkyl)<sub>4</sub>, fucosyl or methylfucosyl.
- 20 19. The compound as claimed in claim 1 and of formula (Ic)

(Ic)

### 25 in which

- ▶ n represents 1, 2 or 3;
- ▶ A represents a substituent chosen from -C(O)-, -C(S)-,  $-CH_2$ -,  $-CHR^{10}$ -,  $-CR^{10}R^{11}$ -, -C(O)O-, -C(O)S-, -C(S)O-, -C(S)S-, -C(O)NH-, -C(NH)NH- or -C(S)NH-;
- ▶ B represents
- o an arylene;
  - a heteroarylene comprising 1 or 2 hetero atoms chosen from nitrogen, oxygen and sulfur;

- a naphthylene;
- a heteronaphthylene comprising 1 or 2 hetero atoms chosen from nitrogen, oxygen and sulfur;
- a divalent radical derived from 2 fused aromatic rings containing 5 or 6 atoms each;
- a divalent radical derived from 2 fused aromatic or heteroaromatic rings containing 5 or 6 atoms each and comprising 1 or 2 hetero atoms chosen from nitrogen, oxygen and sulfur;
- a biphenylene;

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• or a heterobiphenylene comprising 1 or 2 hetero atoms chosen from nitrogen, oxygen and sulfur;

these groups possibly being substituted with one or two substituents  $R^{12}$  and  $R^{13}$  chosen, independently of each other, from halogen, CN, C(O)OR<sup>14</sup>, C(O)NR<sup>15</sup>R<sup>16</sup>, CF<sub>3</sub>, OCF<sub>3</sub>, -NO<sub>2</sub>, N<sub>3</sub>, OR<sup>14</sup>, SR<sup>14</sup>, NR<sup>15</sup>R<sup>16</sup> and C<sub>1</sub>-6-alkyl;

- ▶ D represents a linear or branched, saturated or unsaturated hydrocarbon-based chain containing from 2 to 20 carbon atoms;
- ► E and G represent, independently of each other, a substituent chosen from H, OH, OR<sup>20</sup>, NH<sub>2</sub>, NHR<sup>20</sup>:
- ► R¹ represents a substituent chosen from H, C₁-6-alkyl, C(O)H, and C(O)CH₃;
- ▶  $R^2$ ,  $R^3$ , and  $R^6$  represent, independently of each other, a substituent chosen from H,  $C_{1^-6^-}$  alkyl,  $C(O)C_{1^-6^-}$  alkyl,  $-C(S)C_{1^-6^-}$  alkyl,  $-C(O)OC_{1^-6^-}$  alkyl,  $-C(S)NH_2$ ,  $-C(NH)NH_2$ , -C(NH)
- ▶ R<sup>4</sup> represents a substituent chosen from H, C<sub>1-6</sub>-alkyl or R<sup>21</sup>;
- ► R<sup>5</sup> represents a substituent chosen from H, C<sub>1-6</sub>-alkyl, fucosyl or R<sup>22</sup>;
- ▶ R<sup>7</sup> represents a substituent chosen from H, C<sub>1-6</sub>-alkyl, arabinosyl or R<sup>23</sup>;
- ▶ R<sup>8</sup> represents a substituent chosen from H, C<sub>1-6</sub>-alkyl, fucosyl, methylfucosyl, sulfofucosyl, acetylfucosyl, arabinosyl, SO<sub>3</sub>H, SO<sub>3</sub>Li, SO<sub>3</sub>Na, SO<sub>3</sub>K, SO<sub>3</sub>N(C<sub>1-8</sub>alkyl)<sub>4</sub> or R<sup>24</sup>;
- ► R<sup>9</sup> represents a substituent chosen from H, C<sub>1-6</sub>-alkyl, mannose, glycerol or R<sup>25</sup>;
- Arr R<sup>10</sup>, R<sup>11</sup>, R<sup>17</sup> and R<sup>18</sup> represent, independently of each other, a substituent chosen from C<sub>1-6</sub>-alkyl or F;
- ▶  $R^{14}$ ,  $R^{15}$ ,  $R^{16}$  and  $R^{19}$  represent, independently of each other, a substituent chosen from H or  $C_{1^-6^-}$  alkyl,  $-C(O)C_{1^-6^-}$  alkyl,  $-C(O)C_{1^-6^-}$  alkyl,  $-C(O)NH_2$ ,  $-C(O)NH_2$ ,
- ▶  $R^{20}$ ,  $R^{21}$ ,  $R^{22}$ ,  $R^{23}$ ,  $R^{24}$  and  $R^{25}$  represent, independently of each other, a substituent chosen from  $C(O)C_{1^-6}$ -alkyl,  $-C(S)C_{1^-6}$ -alkyl,  $-C(O)OC_{1^-6}$ -alkyl,  $-C(O)NH_2$ ,  $-C(S)NH_2$ ,  $-C(NH)NH_2$ ,  $-C(O)NHC_{1^-6}$ -alkyl,  $-C(S)NHC_{1^-6}$ -alkyl,  $-C(NH)NHC_{1^-6}$ -alkyl;
- and also the possible geometrical and/or optical isomers, enantiomers and/or diastereoisomers, tautomers, salts, N-oxides, sulfoxides, sulfoxes, and metal or metalloid complexes thereof, which are

agriculturally acceptable. Among the compounds defined above, the most important compounds are the salts, more particularly the lithium, sodium, potassium or tetraalkylammonium salts.

- 20. The compound of formula (Ic) as claimed in claim 19, having one or other of the following characteristics, taken separately or in combination:
  - ▶ n represents 2 or 3;

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- ▶ A represents -C(O)- or -CH<sub>2</sub>-;
- ▶ B represents a phenylene;
- ▶ D represents a linear, saturated or unsaturated hydrocarbon-based chain containing from 3 to 17 carbon atoms;
- ► E and G represent NHC(O)CH<sub>3</sub>;
- ► R¹ represents H, CH₃ or C(O)CH₃;
- ightharpoonup R<sup>2</sup>, R<sup>3</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>9</sup> represent H;
- ► R<sup>4</sup> represents H, C(O)CH<sub>3</sub> or C(O)NH<sub>2</sub>;
- ▶ R<sup>8</sup> represents H, SO<sub>3</sub>H, SO<sub>3</sub>Li, SO<sub>3</sub>Na, SO<sub>3</sub>K, SO<sub>3</sub>N(C<sub>1-8</sub>alkyl)<sub>4</sub>, fucosyl or methylfucosyl.
- 21. The compound of formula (Ic) as claimed in claim 19 or 20, simultaneously having the following characteristics:
  - ▶ n represents 2 or 3;
  - ▶ A represents -C(O)- or -CH<sub>2</sub>-;
  - ► E and G represent NHC(O)CH<sub>3</sub>;
  - ► R<sup>1</sup> represents H, CH<sub>3</sub> or C(O)CH<sub>3</sub>;
  - ► R<sup>2</sup>, R<sup>3</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>9</sup> represent H;
  - ► R<sup>4</sup> represents H, C(O)CH<sub>3</sub> or C(O)NH<sub>2</sub>;
  - ▶ R<sup>8</sup> represents H, SO<sub>3</sub>H, SO<sub>3</sub>Li, SO<sub>3</sub>Na, SO<sub>3</sub>K, SO<sub>3</sub>N(C<sub>1-8</sub>alkyl)<sub>4</sub>, fucosyl or methylfucosyl.
- 22. The compound of formula (Ic) as claimed in any one of claims 19 to 21, simultaneously having the following characteristics:
  - ▶ n represents 2 or 3;
  - ▶ A represents -C(O)- or -CH<sub>2</sub>-;
  - ▶ D represents a linear, saturated or unsaturated hydrocarbon-based chain containing from 3 to 17 carbon atoms:
  - ► E and G represent NHC(O)CH<sub>3</sub>;
  - ► R<sup>1</sup> represents H, CH<sub>3</sub> or C(O)CH<sub>3</sub>;
  - ► R<sup>2</sup>, R<sup>3</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>9</sup> represent H;
  - ► R<sup>4</sup> represents H, C(O)CH<sub>3</sub> or C(O)NH<sub>2</sub>;

- ▶ R<sup>8</sup> represents H, SO<sub>3</sub>H, SO<sub>3</sub>Li, SO<sub>3</sub>Na, SO<sub>3</sub>K, SO<sub>3</sub>N(C<sub>1-8</sub>alkyl)<sub>4</sub>, fucosyl or methylfucosyl.
- 23. The compound of formula (Ic) as claimed in any one of claims 19 to 22, simultaneously having the following characteristics:
  - ▶ n represents 2 or 3;

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- ▶ A represents -C(O)- or -CH<sub>2</sub>-;
- ▶ B represents a phenylene;
- ▶ D represents a linear hydrocarbon-based chain containing 11 carbons, which is saturated, or unsaturated between carbons 4 and 5;
- ► E and G represent NHC(O)CH<sub>3</sub>;
- ▶ R¹ represents H, CH₃ or C(O)CH₃;
- ▶ R<sup>1</sup> represents H or CH<sub>3</sub>;
- ► R<sup>2</sup>, R<sup>3</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>9</sup> represent H;
- ► R<sup>4</sup> represents H, C(O)CH<sub>3</sub> or C(O)NH<sub>2</sub>;
- ▶ R<sup>8</sup> represents H, SO<sub>3</sub>H, SO<sub>3</sub>Li, SO<sub>3</sub>Na, SO<sub>3</sub>K, SO<sub>3</sub>N(C<sub>1</sub>-8alkyl)<sub>4</sub>, fucosyl or methylfucosyl.
- 24. The compound as claimed in claim 1 and of formula (Id)

$$R3$$
 $O-R4$ 
 $O-R6$ 
 $O-R8$ 
 $O-R6$ 
 $O-R8$ 
 $O-$ 

in which

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- n represents 1, 2 or 3;
- ▶ B represents
  - an arylene;
  - a heteroarylene comprising 1 or 2 hetero atoms chosen from nitrogen, oxygen and sulfur;
  - a naphthylene;
  - a heteronaphthylene comprising 1 or 2 hetero atoms chosen from nitrogen, oxygen and sulfur;
  - a divalent radical derived from 2 fused aromatic rings containing 5 or 6 atoms each;
  - a divalent radical derived from 2 fused aromatic or heteroaromatic rings containing 5 or 6 atoms each and comprising 1 or 2 hetero atoms chosen from nitrogen, oxygen and sulfur;

a biphenylene;

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• or a heterobiphenylene comprising 1 or 2 hetero atoms chosen from nitrogen, oxygen and sulfur;

these groups possibly being substituted with one or two substituents  $R^{12}$  and  $R^{13}$  chosen, independently of each other, from halogen, CN, C(O)OR<sup>14</sup>, C(O)NR<sup>15</sup>R<sup>16</sup>, CF<sub>3</sub>, OCF<sub>3</sub>, -NO<sub>2</sub>, N<sub>3</sub>, OR<sup>14</sup>, SR<sup>14</sup>, NR<sup>15</sup>R<sup>16</sup> and C<sub>1-6</sub>-alkvl:

- ▶ D represents a linear or branched, saturated or unsaturated hydrocarbon-based chain containing from 2 to 20 carbon atoms;
- ► E and G represent, independently of each other, a substituent chosen from H, OH, OR<sup>20</sup>, NH<sub>2</sub>, NHR<sup>20</sup>:
- ► R<sup>1</sup> represents a substituent chosen from H, C<sub>1-6</sub>-alkyl, C(O)H, and C(O)CH<sub>3</sub>;
- ▶  $R^2$ ,  $R^3$ , and  $R^6$  represent, independently of each other, a substituent chosen from H,  $C_{1^-6^-}$  alkyl,  $C(O)C_{1^-6^-}$  alkyl,  $-C(S)C_{1^-6^-}$  alkyl,  $-C(O)OC_{1^-6^-}$  alkyl,  $-C(O)NH_2$ ,  $-C(S)NH_2$ ,  $-C(NH)NH_2$ , -C(NH)N
- ▶ R<sup>4</sup> represents a substituent chosen from H, C<sub>1-6</sub>-alkyl or R<sup>21</sup>;
- ► R<sup>5</sup> represents a substituent chosen from H, C<sub>1-6</sub>-alkyl, fucosyl or R<sup>22</sup>;
- ▶ R<sup>7</sup> represents a substituent chosen from H, C<sub>1-6</sub>-alkyl, arabinosyl or R<sup>23</sup>;
- ▶ R<sup>8</sup> represents a substituent chosen from H, C<sub>1-6</sub>-alkyl, fucosyl, methylfucosyl, sulfofucosyl, acetylfucosyl, arabinosyl, SO<sub>3</sub>H, SO<sub>3</sub>Li, SO<sub>3</sub>Na, SO<sub>3</sub>K, SO<sub>3</sub>N(C<sub>1-8</sub>alkyl)<sub>4</sub> or R<sup>24</sup>;
- ▶ R<sup>9</sup> represents a substituent chosen from H, C<sub>1-6</sub>-alkyl, mannose, glycerol or R<sup>25</sup>;
- ▶  $R^{10}$ ,  $R^{11}$ ,  $R^{17}$  and  $R^{18}$  represent, independently of each other, a substituent chosen from  $C_{1-6}$ -alkyl or F;
- ▶  $R^{14}$ ,  $R^{15}$ ,  $R^{16}$  and  $R^{19}$  represent, independently of each other, a substituent chosen from H or  $C_{1^-6^-}$  alkyl,  $-C(O)C_{1^-6^-}$  alkyl,  $-C(O)C_{1^-6^-}$  alkyl,  $-C(O)NH_2$ ,  $-C(O)NH_2$ ,
- ▶  $R^{20}$ ,  $R^{21}$ ,  $R^{22}$ ,  $R^{23}$ ,  $R^{24}$  and  $R^{25}$  represent, independently of each other, a substituent chosen from  $C(O)C_{1^-6^-}$ alkyl,  $-C(S)C_{1^-6^-}$ alkyl,  $-C(O)OC_{1^-6^-}$ alkyl,  $-C(O)NH_2$ ,  $-C(S)NH_2$ ,  $-C(NH)NH_2$ ,  $-C(O)NHC_{1^-6^-}$ alkyl,  $-C(S)NHC_{1^-6^-}$ alkyl,  $-C(NH)NHC_{1^-6^-}$ alkyl,  $-C(NH)NHC_{1^-6^-}$ alkyl,  $-C(NH)NHC_{1^-6^-}$ alkyl,  $-C(NH)NHC_{1^-6^-}$ alkyl,

and also the possible geometrical and/or optical isomers, enantiomers and/or diastereoisomers, tautomers, salts, N-oxides, sulfoxides, sulfones, and metal or metalloid complexes thereof, which are agriculturally acceptable. Among the compounds defined above, the most important compounds are the salts, more particularly the lithium, sodium, potassium or tetraalkylammonium salts.

- 25. The compound of formula (Id) as claimed in claim 24, having one or other of the following characteristics, taken separately or in combination:
  - ▶ n represents 2 or 3;

- ▶ B represents a phenylene;
- ▶ D represents a linear, saturated or unsaturated hydrocarbon-based chain containing from 3 to 17 carbon atoms;
- ► E and G represent NHC(O)CH<sub>3</sub>;
- ▶ R¹ represents H or CH₃;

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- ► R<sup>2</sup>, R<sup>3</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>9</sup> represent H;
- ► R<sup>4</sup> represents H, C(O)CH<sub>3</sub> or C(O)NH<sub>2</sub>;
- ▶ R<sup>8</sup> represents H, SO<sub>3</sub>H, SO<sub>3</sub>Li, SO<sub>3</sub>Na, SO<sub>3</sub>K, SO<sub>3</sub>N(C<sub>1-8</sub>alkyl)<sub>4</sub>, fucosyl or methylfucosyl.
- 10 26. The compound of formula (Id) as claimed in claim 24 or 25, simultaneously having the following characteristics:
  - n represents 2 or 3;
  - ► E and G represent NHC(O)CH<sub>3</sub>;
  - ► R<sup>1</sup> represents H or CH<sub>3</sub>;
  - ► R<sup>2</sup>, R<sup>3</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>9</sup> represent H;
  - ► R<sup>4</sup> represents H, C(O)CH<sub>3</sub> or C(O)NH<sub>2</sub>;
  - ▶ R<sup>8</sup> represents H, SO<sub>3</sub>H, SO<sub>3</sub>Li, SO<sub>3</sub>Na, SO<sub>3</sub>K, SO<sub>3</sub>N(C<sub>1-8</sub>alkyl)<sub>4</sub>, fucosyl or methylfucosyl.
- 27. The compound of formula (Id) as claimed in any one of claims 24 to 26, simultaneously having the following characteristics:
  - n represents 2 or 3;
  - ▶ D represents a linear, saturated or unsaturated hydrocarbon-based chain containing from 3 to 17 carbon atoms;
  - ► E and G represent NHC(O)CH<sub>3</sub>;
  - ▶ R¹ represents H or CH₃;
    - ► R<sup>2</sup>, R<sup>3</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>9</sup> represent H;
    - ► R<sup>4</sup> represents H, C(O)CH<sub>3</sub> or C(O)NH<sub>2</sub>;
    - ▶ R<sup>8</sup> represents H, SO<sub>3</sub>H, SO<sub>3</sub>Li, SO<sub>3</sub>Na, SO<sub>3</sub>K, SO<sub>3</sub>N(C<sub>1-8</sub>alkyl)<sub>4</sub>, fucosyl or methylfucosyl.
- 28. The compound of formula (Id) as claimed in any one of claims 24 to 27, simultaneously having the following characteristics:
  - ▶ n represents 2 or 3;
  - ▶ B represents a phenylene;
  - ▶ D represents a linear hydrocarbon-based chain containing 11 carbons, which is saturated, or unsaturated between carbons 4 and 5;
  - ► E and G represent NHC(O)CH<sub>3</sub>;

- ▶ R¹ represents H or CH₃;
- ► R<sup>2</sup>, R<sup>3</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>9</sup> represent H;
- ► R<sup>4</sup> represents H, C(O)CH<sub>3</sub> or C(O)NH<sub>2</sub>;
- ▶ R<sup>8</sup> represents H, SO<sub>3</sub>H, SO<sub>3</sub>Li, SO<sub>3</sub>Na, SO<sub>3</sub>K, SO<sub>3</sub>N(C<sub>1-8</sub>alkyl)<sub>4</sub>, fucosyl or methylfucosyl.
- 29. The compound as claimed in claim 1 and of formula (le)

#### in which

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- ▶ n represents 1, 2 or 3;
- B represents
  - an arylene;
  - a heteroarylene comprising 1 or 2 hetero atoms chosen from nitrogen, oxygen and sulfur;
  - a naphthylene;
  - a heteronaphthylene comprising 1 or 2 hetero atoms chosen from nitrogen, oxygen and sulfur:
  - a divalent radical derived from 2 fused aromatic rings containing 5 or 6 atoms each;
  - a divalent radical derived from 2 fused aromatic or heteroaromatic rings containing 5 or 6 atoms each and comprising 1 or 2 hetero atoms chosen from nitrogen, oxygen and sulfur;
  - a biphenylene;
  - or a heterobiphenylene comprising 1 or 2 hetero atoms chosen from nitrogen, oxygen and sulfur:

these groups possibly being substituted with one or two substituents  $R^{12}$  and  $R^{13}$  chosen, independently of each other, from halogen, CN, C(O)OR<sup>14</sup>, C(O)NR<sup>15</sup>R<sup>16</sup>, CF<sub>3</sub>, OCF<sub>3</sub>, -NO<sub>2</sub>, N<sub>3</sub>, OR<sup>14</sup>, SR<sup>14</sup>, NR<sup>15</sup>R<sup>16</sup> and C<sub>1</sub>-6-alkyl;

- ▶ D represents a linear or branched, saturated or unsaturated hydrocarbon-based chain containing from 2 to 20 carbon atoms;
- ► E and G represent, independently of each other, a substituent chosen from H, OH, OR<sup>20</sup>, NH<sub>2</sub>, NHR<sup>20</sup>;
- ▶ R¹ represents a substituent chosen from H, C₁-6-alkyl, C(O)H, and C(O)CH₃;

- ▶  $R^2$ ,  $R^3$ , and  $R^6$  represent, independently of each other, a substituent chosen from H,  $C_{1^-6^-}$ alkyl,  $C(O)C_{1^-6^-}$ alkyl,  $-C(S)C_{1^-6^-}$ alkyl,  $-C(O)OC_{1^-6^-}$ alkyl,  $-C(O)NH_2$ ,  $-C(S)NH_2$ ,  $-C(NH)NH_2$ ,  $-C(O)NHC_{1^-6^-}$ alkyl,  $-C(S)NHC_{1^-6^-}$ alkyl,  $-C(S)NHC_{1^-6^-}$
- ▶ R<sup>4</sup> represents a substituent chosen from H, C<sub>1-6</sub>-alkyl or R<sup>21</sup>;
- ▶ R<sup>5</sup> represents a substituent chosen from H, C<sub>1-6</sub>-alkyl, fucosyl or R<sup>22</sup>;
- ► R<sup>7</sup> represents a substituent chosen from H, C<sub>1-6</sub>-alkyl, arabinosyl or R<sup>23</sup>;
- ▶ R<sup>8</sup> represents a substituent chosen from H, C<sub>1-6</sub>-alkyl, fucosyl, methylfucosyl, sulfofucosyl, acetylfucosyl, arabinosyl, SO<sub>3</sub>H, SO<sub>3</sub>Li, SO<sub>3</sub>Na, SO<sub>3</sub>K, SO<sub>3</sub>N(C<sub>1-8</sub>alkyl)<sub>4</sub> or R<sup>24</sup>;
- ▶ R<sup>9</sup> represents a substituent chosen from H, C<sub>1-6</sub>-alkyl, mannose, glycerol or R<sup>25</sup>;
- ▶ R<sup>10</sup>, R<sup>11</sup>, R<sup>17</sup> and R<sup>18</sup> represent, independently of each other, a substituent chosen from C<sub>1-6</sub>-alkyl or F;
- ▶  $R^{14}$ ,  $R^{15}$ ,  $R^{16}$  and  $R^{19}$  represent, independently of each other, a substituent chosen from H or  $C_{1^-6^-}$  alkyl,  $-C(O)C_{1^-6^-}$  alkyl,  $-C(O)C_{1^-6^-}$  alkyl,  $-C(O)NH_2$ ,  $-C(O)NH_2$ ,
- ▶  $R^{20}$ ,  $R^{21}$ ,  $R^{22}$ ,  $R^{23}$ ,  $R^{24}$  and  $R^{25}$  represent, independently of each other, a substituent chosen from  $C(O)C_{1^-6}$ -alkyl,  $-C(S)C_{1^-6}$ -alkyl,  $-C(O)OC_{1^-6}$ -alkyl,  $-C(O)NH_2$ ,  $-C(S)NH_2$ ,  $-C(NH)NH_2$ ,  $-C(O)NHC_{1^-6}$ -alkyl,  $-C(S)NHC_{1^-6}$ -alkyl,  $-C(NH)NHC_{1^-6}$ -alkyl,

and also the possible geometrical and/or optical isomers, enantiomers and/or diastereoisomers, tautomers, salts, N-oxides, sulfoxides, sulfones, and metal or metalloid complexes thereof, which are agriculturally acceptable. Among the compounds defined above, the most important compounds are the salts, more particularly the lithium, sodium, potassium or tetraalkylammonium salts.

- 30. The compound of formula (le) as claimed in claim 29, having one or other of the following characteristics, taken separately or in combination:
  - n represents 2 or 3;

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- B represents a phenylene;
- ▶ D represents a linear, saturated or unsaturated hydrocarbon-based chain containing from 3 to 17 carbon atoms;
- ▶ E and G represent NHC(O)CH<sub>3</sub>;
- ► R¹ represents H or C(O)CH<sub>3</sub>;
- ► R<sup>2</sup>, R<sup>3</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>9</sup> represent H;
- R<sup>4</sup> represents H₁ C(O)CH₃ or C(O)NH₂;
- ▶ R<sup>8</sup> represents H, SO<sub>3</sub>H, SO<sub>3</sub>Li, SO<sub>3</sub>Na, SO<sub>3</sub>K, SO<sub>3</sub>N(C<sub>1-8</sub>alkyl)<sub>4</sub>, fucosyl or methylfucosyi.
- 35 31. The compound of formula (le) as claimed in claim 29 or 30, simultaneously having the following characteristics:

- n represents 2 or 3;
- ▶ E and G represent NHC(O)CH<sub>3</sub>;
- ► R¹ represents H or C(O)CH<sub>3</sub>;
- ightharpoonup R<sup>2</sup>, R<sup>3</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>9</sup> represent H;
- ► R<sup>4</sup> represents H, C(O)CH<sub>3</sub> or C(O)NH<sub>2</sub>;
- ▶ R<sup>8</sup> represents H, SO<sub>3</sub>H, SO<sub>3</sub>Li, SO<sub>3</sub>Na, SO<sub>3</sub>K, SO<sub>3</sub>N(C<sub>1-8</sub>alkyl)<sub>4</sub>, fucosyl or methylfucosyl.
- 32. The compound of formula (le) as claimed in any one of claims 29 to 31, simultaneously having the following characteristics:
  - n represents 2 or 3;

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- ▶ D represents a linear, saturated or unsaturated hydrocarbon-based chain containing from 3 to 17 carbon atoms;
- ► E and G represent NHC(O)CH<sub>3</sub>;
- ► R<sup>1</sup> represents H or C(O)CH<sub>3</sub>;
- ► R<sup>2</sup>, R<sup>3</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>9</sup> represent H;
- ► R<sup>4</sup> represents H, C(O)CH<sub>3</sub> or C(O)NH<sub>2</sub>;
- ▶ R<sup>8</sup> represents H, SO<sub>3</sub>H, SO<sub>3</sub>Li, SO<sub>3</sub>Na, SO<sub>3</sub>K, SO<sub>3</sub>N(C<sub>1-8</sub>alkyl)<sub>4</sub>, fucosyl or methylfucosyl.
- 33. The compound of formula (Ie) as claimed in any one of claims 29 to 32, simultaneously having the following characteristics:
  - ▶ n represents 2 or 3;
  - ▶ B represents a phenylene;
  - ▶ D represents a linear hydrocarbon-based chain containing 11 carbons, which is saturated, or unsaturated between carbons 4 and 5;
  - ▶ E and G represent NHC(O)CH<sub>3</sub>;
    - ► R<sup>1</sup> represents H or C(O)CH<sub>3</sub>;
    - ► R<sup>2</sup>, R<sup>3</sup>, R<sup>5</sup>, R<sup>6</sup>, R<sup>7</sup> and R<sup>9</sup> represent H;
    - ► R<sup>4</sup> represents H, C(O)CH<sub>3</sub> or C(O)NH<sub>2</sub>;
    - ▶ R<sup>8</sup> represents H, SO<sub>3</sub>H, SO<sub>3</sub>Li, SO<sub>3</sub>Na, SO<sub>3</sub>K, SO<sub>3</sub>N(C<sub>1-8</sub>alkyl)<sub>4</sub>, fucosyl or methylfucosyl.
  - 34. The compound as claimed in any one of claims 1 to 33, for which
    - B represents
      - a naphthylene;
      - an arylene;
      - a heteroarylene comprising 1 or 2 hetero atoms chosen from nitrogen, oxygen and sulfur;

or

• a heteronaphthylene comprising 1 or 2 hetero atoms chosen from nitrogen, oxygen and sulfur;

these groups possibly being substituted with one or two substituents  $R^{12}$  and  $R^{13}$  chosen, independently of each other, from halogen, CN, C(O)OR<sup>14</sup>, C(O)NR<sup>15</sup>R<sup>16</sup>, CF<sub>3</sub>, OCF<sub>3</sub>, -NO<sub>2</sub>, N<sub>3</sub>, OR<sup>14</sup>, SR<sup>14</sup>, NR<sup>15</sup>R<sup>16</sup> and C<sub>1-6</sub>-alkyl.

- 35. The compound as claimed in any one of claims 1 to 34, for which
  - ▶ B represents

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- an arylene;
- or a heteroarylene comprising 1 or 2 hetero atoms chosen from nitrogen, oxygen and sulfur;

these groups possibly being substituted with one or two substituents  $R^{12}$  and  $R^{13}$  chosen, independently of each other, from halogen, CN, C(O)OR<sup>14</sup>, C(O)NR<sup>15</sup>R<sup>16</sup>, CF<sub>3</sub>, OCF<sub>3</sub>, -NO<sub>2</sub>, N<sub>3</sub>, OR<sup>14</sup>, SR<sup>14</sup>, NR<sup>15</sup>R<sup>16</sup> and C<sub>1-6</sub>-alkyl.

36. The compound as claimed in any one of claims 1 to 35, for which

- ▶ B represents
  - a phenylene;
  - or a heterophenylene comprising 1 or 2 hetero atoms chosen from nitrogen, oxygen and sulfur;

these groups possibly being substituted with one or two substituents  $R^{12}$  and  $R^{13}$  chosen, independently of each other, from halogen, CN, C(O)OR<sup>14</sup>, C(O)NR<sup>15</sup>R<sup>16</sup>, CF<sub>3</sub>, OCF<sub>3</sub>, -NO<sub>2</sub>, N<sub>3</sub>, OR<sup>14</sup>, SR<sup>14</sup>, NR<sup>15</sup>R<sup>16</sup> and C<sub>1-6</sub>-alkyl.

- 37. The compound as claimed in any one of claims 1 to 33, for which
  - ▶ B represents a substituent chosen from:

B1	R12 R13	B6	S +N R12	B11	R12 R13	B16	R13 R12
B2	R12 N R13	B7	O +N R12	B12	R13 R12	B17	R13 H N R12
В3	S H12	В8	H N N R12	B13	R13 R12	B18	R12 H
B4	0 R12	В9	R12 R13	B14	N/ R13	B19	R12 S R13
B5	HZ R12	B10	R13 R12	B15	R13 N R12	B20	R13 R12 S N

in which  $R^{12}$  and  $R^{13}$  represent two substituents chosen, independently of each other, from halogen, CN, CF<sub>3</sub>, OCF<sub>3</sub>, -NO<sub>2</sub>, N<sub>3</sub>, OR<sup>14</sup>, SR<sup>14</sup>, NR<sup>15</sup>R<sup>16</sup> and C<sub>1-6</sub>-alkyl.

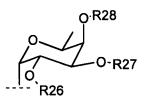
- 38. The compound as claimed in claim 37, for which B represents a phenylene B1 that may be substituted with one or two substituents R<sup>12</sup> and R<sup>13</sup> chosen, independently of each other, from halogen, CN, CF<sub>3</sub>, OCF<sub>3</sub>, -NO<sub>2</sub>, N<sub>3</sub>, OR<sup>14</sup>, SR<sup>14</sup>, NR<sup>15</sup>R<sup>16</sup> and C<sub>1-6</sub>-alkyl.
- 39. The compound as claimed in one of the preceding claims, having one of the following characteristics, taken separately or in combination:
  - $\rightarrow$  n = 2 or 3;

- ▶ A represents -C(O)- or -CH<sub>2</sub>-;
- ► C represents -O-;
- ► E and G represent NHC(O)CH<sub>3</sub>;
- ► R<sup>1</sup> represents H or C(O)CH<sub>3</sub>;
- ► R<sup>2</sup>, R<sup>3</sup>, R<sup>5</sup>, R<sup>6</sup>, and R<sup>7</sup> represent a hydrogen atom;
- ► R<sup>4</sup> represents a substituent chosen from H, C(O)CH<sub>3</sub> and C(O)NH<sub>2</sub>;

- ▶ R<sup>8</sup> represents a substituent chosen from H, fucosyl, methylfucosyl, sulfofucosyl, acetylfucosyl, arabinosyl, SO<sub>3</sub>H, SO<sub>3</sub>Li, SO<sub>3</sub>Na, SO<sub>3</sub>K and SO<sub>3</sub>N(C<sub>1</sub>-<sub>8</sub>alkyl)<sub>4</sub>;
- ► R<sup>9</sup> represents a hydrogen atom.
- 5 40. The compound as claimed in one of the preceding claims, having all of the following characteristics:
  - ightharpoonup n = 2 or 3;

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- ▶ A represents -C(O)- or -CH<sub>2</sub>-;
- ► C represents -O-;
- ► E and G represent NHC(O)CH<sub>3</sub>;
- → R¹ represents H or C(O)CH₃;
- ► R<sup>2</sup>, R<sup>3</sup>, R<sup>5</sup>, R<sup>6</sup>, and R<sup>7</sup> represent a hydrogen atom;
- ► R<sup>4</sup> represents a substituent chosen from H, C(O)CH<sub>3</sub> or C(O)NH<sub>2</sub>;
- ► R<sup>8</sup> represents a substituent chosen from H, fucosyl, methylfucosyl, sulfofucosyl, acetylfucosyl, arabinosyl, SO<sub>3</sub>H, SO<sub>3</sub>Li, SO<sub>3</sub>Na, SO<sub>3</sub>K or SO<sub>3</sub>N(C<sub>1-8</sub>alkyl)<sub>4</sub>;
- ► R<sup>9</sup> represents a hydrogen atom.
- 41. The compound as claimed in one of the preceding claims, for which  $R^8$  represents H,  $SO_3H$ ,  $SO_3Li$ ,  $SO_3Na$ ,  $SO_3N$ ,  $SO_3N$ ( $C_{1-8}alkyl$ )<sub>4</sub> or a substituent of formula:



20 in which

- ► R<sup>26</sup> represents a substituent chosen from H and CH<sub>3</sub>;
- ▶  $R^{27}$  and  $R^{28}$  represent, independently of each other, a substituent chosen from H, C(O)CH<sub>3</sub>, SO<sub>3</sub>H, SO<sub>3</sub>Li, SO<sub>3</sub>Na, SO<sub>3</sub>K and SO<sub>3</sub>N(C<sub>1</sub>-8alkyI)<sub>4</sub>.
- 42. The compound as claimed in claim 41, for which R<sup>26</sup>, R<sup>27</sup> and R<sup>28</sup> represent a hydrogen atom.
  - 43. The compound as claimed in one of the preceding claims, for which D represents a linear, saturated or unsaturated hydrocarbon-based chain containing from 7 to 15 carbon atoms.
- 30 44. The compound as claimed in one of the preceding claims, for which D represents a hydrocarbonbased chain according to one of the formulae represented below

D1	`_{	D4	`
D2	<u>√</u>   m = [] <sub>p</sub>	D5	`
D3	`{\} <sub>0</sub>	D6	, s

in which

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- ▶ m = 1 to 12
- ightharpoonup p = 0 to 11
- ightharpoonup q = 6 to 14
- ► s = 5 to 13

with  $m+p \le 12$  and  $m+p \ge 4$ .

45. The compound as claimed in one of the preceding claims, for which D represents a hydrocarbon-based chain according to one of the formulae represented below

D1 
$$\longrightarrow$$
  $p$ 

D2  $\longrightarrow$   $m$   $p$ 

D3  $\longrightarrow$   $q$ 

in which

- $\rightarrow$  m = 1 to 12
- ightharpoonup p = 0 to 11
- ightharpoonup q = 6 to 14

with  $m+p \le 12$  and  $m+p \ge 4$ ;

- 46. The compound as claimed in one of the preceding claims, for which D represents a linear hydrocarbon-based chain containing 11 carbon atoms, which is saturated, or unsaturated between carbon atoms 4 and 5.
- 5 47. The compound as claimed in one of the preceding claims, corresponding to one of the following formulae:

in which, when it is present, M represents a cation chosen from  $H^+$ ,  $Li^+$ ,  $Na^+$ ,  $K^+$  and  $(C_{1^-8}alkyl)_4N^+$ .